

# IDAHO DEPARTMENT OF FISH & GAME

Jerry M. Conley, Director

Henrys Lake Hatchery

Annual Report



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by  
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Fish Hatchery Superintendent I

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## Henry's Lake Hatchery

### ABSTRACT

The egg take at Henry's Lake was up a little in 1981 from 1980 due to a couple of hundred more cutthroat returning to the hatchery. The hybrid run increased only about a hundred fish over last year.

No soft-shell disease was noted during spawning this year. This led to a good average eye-up and a relatively good hatch.

Hybrid eggs were crossed with cutthroat milt for planting in high mountain lakes. The eggs eyed-up in fair numbers but the after hatch survival was very poor.

Cutthroat eggs were shipped to the Ashton and Mackay Hatcheries to be returned in the fall as three to four inch fish. The cutthroat x rainbow eggs went to the Grace Hatchery. The hybrid x cutthroat eggs were shipped to Eagle, McCall, Ashton and Mackay hatcheries.

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Gene McPherson  
Fish Hatchery Superintendent I



## OBJECTIVES

The objectives of Henrys Lake Hatchery are:

1. To take and ship enough cutthroat eggs to assure a plant of approximately 2,000,000 cutthroat fingerling into Henrys Lake in the fall of 1981.
2. To hold and rear the remaining cutthroat eggs, after shipments to the Ashton and Mackay hatchery, to as large as possible by fall planting time.
3. To take enough cutthroat eggs to cross with rainbow milt to form hybrids and assure a plant in the fall of approximately 125,000 fingerling.
4. To scatter plant about half of the fish going back into the lake and plant the rest down through the ladder to assure a spawning run that will return to the hatchery facility.

## INTRODUCTION

Henrys Lake Hatchery is located in Region 6 along Highway 87 approximately 55 miles north of Ashton in Fremont County. The hatchery was established in 1922. It now consists of two residences and a large building housing hatchery facilities, an office, garage and storage area. A fish ladder extends from a spawning house to the lake.

The hatchery gets about one cfs of gravity fed spring water at a temperature of 45° F. The spring is shared with a private residence across the highway from the hatchery site.

Facilities include ten stacks of Heath incubators containing 16 trays each. The eggs are contained in the incubators until they hatchery and reach the swim-up stage.

There are three vats inside the hatchery which can be divided in half. The fish are started on teed in these vats.

Outside there is an earthen pond used for rearing cutthroat fry prior to release. Fish are transferred to this pond as soon as the weather permits.

The temperature **is** cold enough that growth is slowed considerably. In the summer, solar heat warms the water in the dirt pond to around 53° F which improves growth, but for only a period of two to three months.

## FISH PRODUCTION

The number of adult fish returning to the hatchery was up over the previous year. There were 2,931 cutthroat spawners returning with about 55% of these being males. There were 2,315 hybrids that returned with approximately 58% being male fish. The rainbow trout that were used for the hybrid program were taken from the Snake River below the Ashton power dam by electrofishing.

The 1981 egg take for cutthroat eggs was up approximately 1/2 million eggs over the previous year. There were 3,568,030 cutthroat eggs taken, with 260,164 being crossed with rainbow milt to make hybrids. There were 8,904 rainbow eggs taken and crossed with cutthroat milt. Hybrid eggs taken amounted to 939,880 and were also crossed with cutthroat milt. There was not a problem with soft-shell disease this year.

Table 1. Spawn Report 1981

Species	Total	Eye-up %	Total eyed eggs
CTT	3,307,866	85	2,823,387
CTT X RBT	260,164	62	162,180
RBT X CTT	8,904	87	7,812
HYB X CTT	939,880	78	737,708

Table 2. Egg Shipments 1981

Species	Ashton	Mackay	Eagle	Grace	McCall
CTT	1,093,000	1,066,000	-	-	-
CTT X RBT	-	-	-	162,180	-
RBT X CTT*	-	-	-	-	-
HYB X CTT	54,000	78,000	336,084	-	268,000

\* Planted in Henrys Lake as fry from Henrys Lake Hatchery.

The remaining 663,000 cutthroat eggs were kept, hatched and reared at Henrys Lake Hatchery.

An approximate total of 595,000 cutthroat fry were planted in Henrys Lake from Henrys Lake Hatchery. They averaged 507 per pound and totaled 1,174 pounds.

Two methods of planting were tried this year. There was the traditional method in which 323,000 fish were planted through the ladder. The other method was scattering the fish around to various weed beds around the lake. This method was accomplished by using a boat and garbage cans.

These fish added to the cutthroat returned by the Ashton and Mackay hatcheries, brought the total cutthroat plant for 1981 to approximately 2,275,000 fish. Also, 138,000 hybrid fingerling were returned and planted from the Grace Hatchery.

#### HATCHERY IMPROVEMENTS

With the addition of the two rooms on the Superintendent's house, the previous fall, the rest of the interior was ready for a coat of new paint. The spawning house exterior and the cabin exterior both received a paint job.

The drain field installed the previous year was repaired this fall. A good layer of top-soil was spread over the entire backyard in hopes of getting a lawn to grow.

A pole and wire fence was put up around the Superintendent's residence along with the reseeding of some lawn. Some old fence was torn down and cleaned up in a general clean-up operation. Visitors to the hatchery during this time paid compliments to the overall looks of the hatchery grounds.

#### MISCELLANEOUS ACTIVITIES

During spawning season data was collected by the spawntaker as to the number of fish, sex, species and 10% size sample of all fish returning to the hatchery facility.

The latter part of the summer to the end of fishing season, time was spent assisting research with data collection on Henrys Lake. This involved angler counts and interviews.

Time was also spent assisting Conservation Officer Bruce Penske with enforcement work and animal salvage during the controlled and general hunting seasons.

#### COMMENTS

I had a lot of visitors at the hatchery during the spawntaking operation and all summer long. They were very interested in the operation and the quality of the fishing on Henrys Lake. After an explanation of the Department's policy regarding the lake, most were satisfied that we were doing a reasonably good job. Most of the people wanted instant results on the poor fishing problem.

Henrys Lake Hatchery is indeed an excellent place to spend the summer.

#### STAFF

The 1981 staff consisted of one permanent employee and one temporary employee.

Fish Hatchery Superintendent I  
Laborer

Gene McPherson  
Charles Mainwaring